

*Compound Comminuted Fracture of the Left Temporal Region of the Skull, with loss of bone, and about six drachms of brain, resulting from the kick of a horse, followed by complete recovery.* By Benj. L. BIRD, Jr., M.D.

On the morning of November 3, 1864, I was called to see a negro girl, aged eight years, who had been kicked by a horse on the head while playing in the yard the evening before. Upon inquiry I learned from an intelligent lady, who saw the child a moment after the accident, that she appeared a little stunned, and ran in a zigzag course, but did not become entirely insensible; hemorrhage from the wound slight; slept pretty well during the night, vomiting, however, occasionally. Upon removing the bandage, a large quantity of brain was found upon it, and some was still exuding from the wound of about the consistency of thick cream. The scalp being very much contused and swollen, I could not explore the wound, nor did I think it necessary, as the injured brain could escape externally, and the child was perfectly sensible. I dressed the wound with lint and the bandage, and kept the parts wet with lead water and tincture of opium. There was incessant vomiting from the first, which ceased after a time under the use of mustard to the epigastrium and spine and lime-water and milk internally. There was headache and the bowels were constipated, for which cold cloths were applied to the head and a mercurial cathartic as soon as admissible. There was more or less constitutional irritation for several days after the accident. The antiphlogistic regimen was strictly enforced, and febrifuge mixtures administered whenever there was fever.

On the second day, Nov. 4th, I found the child still sensible and doing remarkably well, some fever but less vomiting and headache, stomach more retentive. The swelling about the wound having somewhat subsided, I could now explore the fractured bones. Upon introducing the finger under the scalp, I discovered that a piece of bone had been staved out by the kick, making a fissured opening large enough for the easy introduction of two fingers along the fissure, through which the ruptured brain had escaped. Other portions of bone could be felt by passing the finger under the scalp to be fractured and a little depressed; the serrated edges of the bones in position could be felt above the depressed portions for the extent of half the temporal fossa. The hole in the skull made by the loss of bone was just above the temporal ridge in the coronal suture. The membranes were of course ruptured, and as the injured brain escaped through them, the opening enlarged, so that a partial hernia of the brain took place whenever the wound was dressed, subject to being further minced by the sharp edges of bone through which it protruded. I now brought the edges of the wound together, as far as the contused and swollen parts would permit, by means of adhesive strips, and dressed it with cerate, a compress of lint and the bandage, which, while it afforded sufficient support to the brain, allowed the ready escape of nature's debris. I continued to dress it in this way every other day for ten days, closing the wound a little each time. As the discharge had now greatly decreased, and the scalp wound extending down upon the cheek began to heal, I dressed it once in five days, using cerate, lint, and a pasteboard splint moulded to the shape of that portion of the skull. At each subsequent visit the wound was found to be progressing favourably; there was, however, an ichorous discharge which excoriated the parts around. I was apprehensive that a portion of denuded bone or some of the sharp edges so perceptible to the touch might die or scale off—thus keeping the wound open for a longer time, but happily all the pieces of

bone were sufficiently nourished to maintain their vitality. I would have removed these sharp edges, which were irritating the brain and its membranes, and the operation seemed to be clearly called for, but the administration of ether would have been hazardous, and whenever the child screamed the brain would forcibly protrude through the opening in the skull, so I concluded to leave the operation to nature, who performed it by the process of absorption far better, and with greater safety to the patient. On Dec. 20th, forty-seven days from the day of the accident, the wound had entirely healed, and up to this time, Feb. 2, the head is perfectly secure and the pasteboard cap has been discontinued.

Strange to say, no inflammation of the brain or its membranes took place during the whole course of the treatment, nor were there any symptoms of compression from the first; these circumstances, connected with the eventual cure, I attribute to the escape of a button of bone at the time of the accident, allowing the egress of effusions which otherwise must have accumulated upon the brain, causing compression—hence the importance of trephining in cases of comminuted fracture before the symptoms of compression arise.

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*Cases of Gunshot Wounds of the Head.* By W. B. TRULL, M.D., Ass. Surgeon U. S. Vols.

CASE I. Anthony Proud, aged 16, private in Co. C., 128th Indiana Infantry, was wounded in the battle of Franklin, Tenn., Nov. 30, 1864. Admitted into hospital Dec. 1st. Patient was able to give a description of the injury, which was corroborated by an examination of the fractured bone. A conical musket-ball had struck the skull near the right parietal eminence, driving fragments of bone deep into the brain, the ball escaping except a small section which, splitting upon the edge of the bony surface, penetrated both lobes of the cerebrum. Water dressings were applied to wound. The patient conversed intelligently, showing no disturbance of the intellectual powers; he presented no unfavourable symptoms, neither of paralysis nor pain, except a slight headache, for thirty-six hours after admission. He began now to manifest a marked indifference to surrounding objects, concealing his head in the bed-clothes, refusing the attentions of the nurses, until he sank into a comatose condition, and died Dec. 2.

A *post-mortem* examination, eighteen hours after death, showed firm coagula between the dura and pia mater, spicula of bone and the track of the lead, which was found lodged in the left lobe of the cerebrum near the "island of Reil;" the track extended just above the corpus callosum. A considerable quantity of cerebral substance had been displaced.

CASE II. John Caley, aged 51, native of Virginia, Sergt. Co. A, 11th Tenn. Infantry, was wounded in a melee at Sherman Barracks, near Nashville, Tenn., Oct. 27th, 1864.

A pistol-ball struck the skull near the left parietal eminence, driving a large fragment of bone deep into the brain, and burying itself in a post in the vicinity. The bone was removed soon after admission into ward, and a probe could be readily introduced as far as the lateral ventricle. Paralysis of the auditory nerve and brachial plexus of right side was instantaneous.

Patient lay with head inclining far to the left, refusing to change his position. Secretions continued to be normal and regular, pulse soft and slow, and intellect unimpaired. There was no expression of pain until ninth day after admission, when gangrene of the cerebrum was detected.